

SUPPORT FOR THE AMENDMENTS

This Preliminary Amendment amends the specification by replacing the original abstract with an abstract of 150 words or less; cancels Claims 1-25; and adds new Claims 26-36. Support for the amendments is found in the specification and claims as originally filed. No new matter is believed to be added by entry of these amendments.

Upon entry of these amendments, Claims 26-36 will be pending in this application. Claim 26 is independent.

REMARKS

The rejection of the claims in parent U.S. Application No. 09/816,397 under the judicially created doctrine of obviousness type double patenting over Claims 1-16 (sic) of U.S. 6,527,818 is respectfully traversed. U.S. 6,527,818 fails to describe a method for polishing an interlayer insulating film with an elastic modulus of no greater than 20 GPa, or a polishing composition containing organic/inorganic composite particles with zeta potentials of opposite signs bonded by electrostatic force.

Claims 1-16 of U.S. 6,527,818 are directed to a process of polishing *metal* films, rather than the *insulating* films of the claimed method. Insulating films are not metals, since metals are typically conductors rather than insulators. Thus, U.S. 6,527,818 claims a method of polishing quite different surfaces. Furthermore, U.S. 6,527,818 simply claims compositions containing an "abrasive", without specifying the type of abrasive. In contrast, the claimed process recites an organic/inorganic abrasive particle in which the organic and inorganic components have zeta potentials of opposite sign and are bonded by electrostatic force. Since one would reasonably expect that different results would be obtained by polishing different types of surfaces with different types of abrasive compositions, Applicants

respectfully submit that the claims of U.S. 6,527,818 fail to suggest the claimed process. Accordingly, Applicants respectfully request that the rejection be withdrawn.

The provisional rejection in parent U.S. Application No. 09/816,397 under the judicially created doctrine of obviousness type double patenting over Claims 1-20 of co-pending application 09/756,193 (now U.S. 6,579,153) is respectfully traversed. U.S. 6,579,153 also fails to describe polishing an insulating film with an elastic modulus of no greater than 20 GPa, with an organic/inorganic composite particle having organic and inorganic particles with zeta potentials of opposite signs bonded by electrostatic force.

The claims of U.S. 6,579,153 fail to describe the organic/inorganic particles of the claimed invention, in which the organic and inorganic particles have zeta potentials of opposite signs bonded by electrostatic force. As discussed at page 2 of the Amendment and Request for Reconsideration filed March 10, 2003, in parent U.S. Application No. 09/816,397, there are different types of organic/inorganic particles, prepared by different methods, in which the organic and inorganic components are bonded to each other in a different manner. The manner of bonding the organic and inorganic components of the organic/inorganic composite particle would reasonably be expected to affect the physical properties, and thereby the polishing properties of the organic/inorganic composite particle. Thus, U.S. 6,579,153 reasonably describes a different polishing process, using different abrasive particles. Accordingly, the claims of U.S. 6,579,153 fail to suggest the claimed process.

In addition, the claimed process is a process for polishing an insulating film with an elastic modulus of no greater than 20 GPa. As discussed at page 7 of the present specification, such insulating films include silsesquioxane, fluorine-containing SiO₂, polyimide resins and benzocyclobutene resins. However, the claims of U.S. 6,579,153 are directed to insulating films having a *barrier metal film* formed thereon, and in which an

indentation of the insulating film is filled, at least in part, with a *copper* film (Claim 1). The barrier metal film may include compounds such as *tantalum and/or tantalum nitride* (Claim 18). Thus, the surfaces polished by the methods of Claims 1-20 of U.S. 6,579,153 are quite different from the insulating films of the claimed process having an elastic modulus of no greater than 20 GPa of the claimed process. Accordingly, the claims of U.S. 6,579,153 fail to suggest the claimed process.

The provisional rejection of the claims in parent U.S. Application No. 09/816,397 under the judicially created doctrine of obviousness type double patenting over co-pending Application No. 09/820,749 are respectfully traversed. As stated in M.P.E.P. § 804(I)(B), "If the provisional double patenting rejection in one application is the only rejection remaining in that application, the Examiner should then withdraw that rejection and permit the application to issue as a patent." Since the provisional obviousness type double patenting rejection is the only remaining rejection in this case, Applicants request the provisional rejection be withdrawn in the present application.

Accordingly, and for the reasons stated above, Applicants respectfully submit that the present application is now in condition for allowance. Early notification thereof is earnestly solicited.

Respectfully submitted,

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